

## DOCUMENT RESUME

ED 197 580

FL 011 120

AUTHOR Eder, Donna  
TITLE The Impact of Management and Turn-Allocation Activities on Student Performance. Working Papers in Sociolinguistics, No. 65.  
INSTITUTION Southwest Educational Development Lab., Austin, Tex.  
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.  
PUB DATE Sep 79  
NOTE 23p.  
AVAILABLE FROM Southwest Educational Development Laboratory, 211 East 7th Street, Austin, TX 78701.  
EDRS PRICE MF01/PC01 Plus Postage.  
DESCRIPTORS \*Academic Achievement; \*Classroom Communication; Discipline; \*Discourse Analysis; Group Activities; Primary Education; Sociolinguistics; \*Speech Communication; Student Teacher Relationship; \*Teacher Behavior

## ABSTRACT

This paper examines the effect of a teacher's management and turn-allocation acts on student performance during reading group lessons in a first grade classroom. The class was observed and videotaped for a year, and interviews were conducted with both teacher and students. The study focuses specifically on cases where management, turn-allocation, and academic activities are performed simultaneously by the teacher. It shows through a discourse analysis that one of the consequences of this practice is the disruption of students' reading turns. During the disruption, often another student provides the correct word to a student who had been hesitating over it. When this happens too often, the students who know fewer words have less chance of learning to read. The results of the study suggest that it is crucial that management be minimized as much as possible because of its negative effects. They also indicate the importance of including non-verbal behavior in future research on turn taking. (AMH)

ED 197580

The Impact of Management and  
Turn-Allocation Activities  
on Student Performance\*

Donna Eder  
Indiana University

Sociolinguistic Working Paper

NUMBER 65

September, 1979

Southwest Educational Development Laboratory

211 East Seventh Street

Austin, Texas

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIGIN-  
ATING IT. POINTS OF VIEW OR OPINIONS  
STATED ARE NOT NECESSARILY REPRESENTATIVE  
OF THE NATIONAL INSTITUTE OF  
EDUCATION OR POLICY

2

The Impact of Management and  
Turn-Allocation Activities  
on Student Performance\*

Donna Eder

Although the teacher's role has been shown to include management and turn-allocation responsibilities as well as instructional responsibilities (Kounin, 1970; Mehan, 1979; McHoul, 1979), little is known regarding the impact of these non-academic activities on students' academic performance. Recent studies, however, indicate that academic performance is often a product of the ongoing interaction and is influenced by teachers' behaviors as well as other situational factors (Mehan, 1974; Leiter, 1974.) Furthermore, it is likely that teachers' non-academic activities, as well as their more academic activities, will affect student performance. The purpose of this paper is to examine the effect of management<sup>1</sup> and turn-allocation acts on student performance during reading group lessons. It will focus specifically on cases where management, turn-allocation, and academic activities are performed simultaneously and will show through a discourse analysis that one of the consequences of this practice is the disruption of students' reading turns.

The paper begins with a discussion of the various activities performed by teachers and then focuses on situations where teachers perform these multiple activities simultaneously by using elicitations to regain the attention of inattentive students. Following a discussion of the methods employed; the extent of this practice, including its relative frequency across reading groups of different ability levels, is examined. Finally, the impact of this practice on students' reading performance is analyzed.

Teachers' Management and Turn-Allocation Responsibilities

Because classroom lessons are social as well as academic events, teachers perform a variety of non-academic activities during classroom lessons. Since they know that it does little good to provide students with academic information if no one is listening, teachers devote considerable time and energy to maintaining the attention of students and, in other ways, seeing that norms regarding appropriate social behavior are followed (Kounin, 1970).

Besides monitoring students' social behavior, recent studies indicate that teachers also play a central role in maintaining orderly conversation during classroom lessons. While all conversations are governed by certain turn-taking

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

SEDL

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)."

1

3

rules such as the one-speaker-at-a-time requirement (Sacks, Schegloff, and Jefferson, 1974); additional norms apply to classroom lessons. These norms pertain to the teacher's role as turn-allocator and specify that the teacher is responsible for assigning turns at speech during classroom lessons (Mehan, 1979; McHoul, 1979.) Thus, besides engaging in academic and management activities, teachers routinely use a variety of turn-allocation procedures to maintain orderly interaction.

Despite an increased understanding of the multiple activities which teachers routinely perform, little is known regarding how these activities affect student performance. While studies of academic performance have concentrated mainly on teachers' academic behaviors, especially academic praise and criticism<sup>2</sup>; the one major study of teacher management focused exclusively on the effect of various management techniques on student involvement, (Kounin, 1970.) Thus, although teachers perform both academic and management acts during the same lesson they have previously been examined as if they were entirely separate activities, occurring in different realms. Similarly, studies of the teacher's role as turn-allocator have focused mainly on its effect on classroom talk (McHoul, 1979; Mehan, 1979) and have not systematically examined its effects on student performance.

It is likely that students' academic performances are influenced by teachers' non-academic as well as academic behaviors. While academic performance once thought to be an objective phenomenon, most often represented by students' performance on standardized tests; recent studies have shown the extent to which student performance is dependent on situational factors (Cicourel, et. al., 1974). Specifically, Mehan (1974) found that the same response was accepted by the teacher in some cases and treated as incorrect in others depending on such situational factors as where it occurred in the lesson and the student's past performance. Similarly, Leiter (1974) found that children's performance during kindergarten screening was influenced by the extent to which teachers expanded the children's remarks, used leading questions, and placed their own questions in a larger context.

#### The Simultaneous Performance of Management, Turn-Allocation, and Academic Activities

In order to examine the impact of teachers' non-academic activities on student performance, this paper will focus on situations where teachers simultaneously perform management, turn-allocation, and academic activities.<sup>3</sup> Since the entire lesson could be viewed as one long conversation between the

teacher and students, teachers are continually involved in turn-allocation, frequently combining it with academic acts (Mehan, 1979.) For example, the elicitation: "John, what is the first word?" combines a verbal nomination to John, allocating him the next turn, with a request for academic information. However, if John was previously inattentive this same act might be used to serve a management function as well as academic and turn-allocation functions. In this case the teacher would be attempting to regain John's attention by offering him an opportunity for active participation. Similarly, if several students had become inattentive, a teacher might try to regain their attention by opening the floor to general participation, e.g., "Who can read the first line?"

While these examples involve the assignment of a new turn, elicitations could also be used to regain the attention of other members during a student's reading turn. For example, if several students had become inattentive during Tom's reading turn, the teacher might attempt to regain their attention by asking them to help Tom with the next word. This could be done through either a verbal nomination, e.g., "Who can help him?", or by orientating toward these students and thus allocating the floor to them non-verbally.

Although elicitations are likely to be used for management purposes during all classroom lessons, they are expected to be more frequent during lessons with students of lower ability than with students of higher ability for a number of reasons. First, since teachers tend to make elicitations during turns only after an incidence of difficulty and, since students in lower groups tend to have more difficulty, more elicitations of all kinds are likely to occur during reading turns in the lower groups. Second, since students in the higher groups have less difficulty, their reading turns tend to be shorter, so that the teacher can often wait until the end of a turn to regain the attention of an inattentive student by giving him (her) the next turn. Finally both the greater amount of inattention as well as the greater importance of attention in the lower groups require more management within, as well as between reading turns, (Eder, 1979.)

Kounin (1970) found this practice of calling on other students to be an effective management technique, resulting in greater student involvement. One explanation for this finding is that since most management acts are also a form of misinvolvement (Goffman, 1967.) they are likely to lead to further student misinvolvement by interrupting the flow of the lesson. However, if

management is performed simultaneously with academic acts it is less likely to interrupt the lesson and, thus, less likely to result in further student inattention.

However, the use of elicitations to maintain the involvement of other members during a student's reading turn is likely to have academic consequences as well. By opening the floor to participation by others, the reader's opportunity to figure out the word is likely to be constrained. Although the reader may still contribute the correct answer, it is likely that another member will provide it instead, even though the reader may have been able to figure out the word with more time or help.

In summary, this paper will examine the following issues: 1) the extent to which management, turn-allocation, and academic activities are performed simultaneously, 2) the relative frequency of this practice across groups of different ability levels, and 3) the consequences of this practice for students' academic performance.

#### Methods

In order to determine the extent to which teachers perform management and academic activities simultaneously, a sociolinguistic analysis of videotaped interaction is most appropriate. Not only does this method capture the complexity of teacher-student interaction by allowing one to code the same data on a number of dimensions, it also allows one to code detailed behaviors such as turn allocation procedures that are often impossible to capture using on-the-spot coding. In addition, the use of videotaped data allows for a more complete analysis of interaction which includes non-verbal as well as verbal behaviors. (See Cherry, 1978 for a more detailed discussion on using sociolinguistic analysis to examine teacher-student interaction).

#### Description of Classroom

This study was part of a larger study conducted in a first-grade classroom in a predominantly middle-class school district.<sup>4</sup> As part of the larger study, the classroom was observed an average of two days per week for an entire academic year. Based on these observations, the essential norms governing interaction during reading group lessons were identified.

Most instruction in this classroom occurred in four ability-based reading groups which varied in size from three to seven members. Each group met every day for approximately twenty minutes. While a given reading group lesson might involve a number of activities including unison reading from charts,

periods of silent reading, discussion of work book assignments, etc., the primary instructional activity in all four groups was taking turns reading aloud.<sup>5</sup> During this activity the teacher assigned turns at reading to one student at a time. When that student completed his/her turn, a new reading turn was assigned until all or most of the group members had an opportunity to read.

#### Collection of Videotaped Data

Reading lessons from all four groups were taped on four days in the second and third months of the school year at approximately two-week intervals. Taping was done on different days of the week in order to obtain data which would be representative of that period. A similar procedure was followed in the spring when each of the groups was again taped on four days, approximately two weeks apart. This resulted in a total of thirty-two videotaped reading lessons (eight lessons for each of the four groups.) While the entire lesson was recorded, the following analysis will be restricted to the primary group activity of taking turns reading aloud.

#### Coding Definitions and Procedures

The following definitions will be used for this analysis. A reading turn is defined as the entire period between a nomination to begin reading (which was always a verbal nomination in this class such as "You may start reading, John," or simply, "Maria,") and the assignment of a new reading turn or initiation of a new activity such as silent reading or discussion of work sheets. Thus, during a reading turn, several people including the teacher might have turns to talk. The student nominated to read will be referred to as the reader, while other group members will be referred to as listeners. This of course is based only on their status in regard to the reading turn nomination, not on their actual behavior since listeners occasionally read during someone else's turn.

Reading turn elicitations are defined as any question or statement pertaining to a word to be read which occurred after a reader began his (her) reading turn (see Figure 1, lines 11, 18, and 27 for example). Intercoder agreement for elicitations, based on separate codings for four lessons, was 91 percent.<sup>6</sup> Verbal orientations were coded as being either specified to the reader, specified to listeners, or non-specified. Those specified to the reader mention the reader's name, e.g., "Ruth, what's the 1-word?" Those specified to listeners either mention a listener by name or involve some type

of invitation for open participation. For example, in Line 27 of Figure 1, the teacher asks, "Who knows that little word, a-n-d?", indicating that any member can respond. However, most reading turn elicitations do not involve verbal nominations. The elicitations in Lines 7 and 12 of Figure 1 are examples of unspecified elicitations.

Non-verbal orientation is defined as the direction of eye gaze while giving the elicitation. It was coded as "oriented toward reader", if only the reader was looked at or "oriented toward listener(s)", if a group member other than the reader was looked at while the elicitation was given. While the elicitation in Lines 11 and 18 represent non-verbal orientations to the reader, the elicitation in Line 27 represents a non-verbal orientation to listeners. Non-verbal orientation was coded by a second coder on four lessons resulting in 94 percent intercoder agreement.

Management is defined as any act which functions to gain the attention of students. This includes verbal acts (e.g., "Are you watching?", "Don't touch him.") as well as the following two non-verbal acts: pointing at listeners or pointing at their books for the purpose of directing their attention to the lesson. Although other more subtle forms of non-verbal management occurred such as eye gaze in the direction of inattentive students, their management function was less explicit and thus they were not included. Examples of both verbal and non-verbal management can be found on the coded transcript (see Figure 1). In Line 31, the teacher attempts to gain Robin's attention by telling her to put her marker under the right row of words. This directive is combined with a non-verbal form of management, i.e., pointing to Robin's book. Intercoder agreement, based on twelve lessons, was 64 percent.

Finally, reading turn disruption was defined as any incidence where a listener read a word either prior to or along with the reader after an elicitation by the teacher. An example of a reading turn disruption can be found in Line 30 of Figure 1.

Collection of Interview Data

In addition to collecting observational data, the teacher and students were interviewed at various times throughout the year. One of the purposes of the interviews with the teacher was to identify those issues and concerns which were most salient. These interviews clearly indicated the importance of student attention during reading lessons, as well as the greater problems with maintaining attention in the lower reading groups.

The students' perspective on reading turn disruption was examined in an interview at the end of the year when all of the students in the class were asked whether or not they liked to have other students help them when reading aloud. These interviews were conducted by an experienced interviewer who was unaware of the main research questions of the study. By obtaining interview as well as observational data, the validity of the results of the discourse analysis is greatly increased.

Reading Turn Disruption

It has been argued that teachers occasionally perform management, turn-allocation, and academic activities simultaneously by addressing elicitations to inattentive students, thereby regaining their attention by offering them the opportunity for more active participation. While this could involve the assignment of new academic turns, it is also expected to occur during reading turns resulting in the disruption of those turns.

Elicitations could be addressed to inattentive students through either verbal or non-verbal turn allocation procedures. One verbal procedure used by this teacher was to open the floor to general participation by asking "Who knows?" as in the following example:

Example One  
Low Group  
Reader: Tammy  
Listeners: Jennifer, Cynthia

Teacher: "Come . . ."	
Tammy: " . . . here . . ."	Jennifer and Cynthia
Teacher: "Come here . . ." what's	look away from their
the little a-word?	books. Teacher points
"Come here . . ."	to Tammy's book.
Who knows? Jennifer, are	<u>Points to Jennifer's book</u>
<u>you watching?</u> "Come here . . ."	Points to Tammy's book.
Cynthia: "and"	
Teacher: "and"	

In this example, both Jennifer and Cynthia have become inattentive during Tammy's reading turn. In order to regain their attention, the teacher opens the floor to general participation. The fact that this elicitation is combined with explicit verbal and non-verbal management acts (see underlined acts) indicates that it is being used for management as well as academic purposes.



A similar situation occurs in the next example:

Example Two  
Medium Low Group  
Reader: Dale  
Listeners: Peter, Gary

Teacher: Okay, here we go, Dale  
Dale: "She did . . ."  
Teacher: Let's start again at the top. What's the w-h word?  
Who knows the w-h word?  
Peter, let's go. First word. Who knows it?  
Peter: "When Rosa . . ."

Peter is looking away. Teacher points to Peter's book.  
Peter is playing with his marker.  
Gary starts to talk to Peter.  
Teacher points at Peter's book.

Here the teacher attempts to regain the attention of Peter and Gary by asking: "Who knows the w-h word?" and later: "Who knows it?" Again the fact that the teacher also performs several explicit management acts shows that these elicitations are being used for management purposes. While the teacher might also address elicitations to listeners because the reader is unable to figure out the word alone, this is unlikely to be the case in this example since the reader only made one attempt to read the word prior to having the floor opened to general participation. Thus, although Peter ends up reading the correct word, it is not clear that Dale could not have gotten the word on his own with a little more assistance and time.

Of the 25 reading turn elicitations which included a verbal turn-allocation procedure, 14 were addressed to listeners and only 11 to the student who was currently reading, (see Table 1). In addition, 12 of the 14 elicitations which were addressed to listeners were combined with explicit management acts providing a clear indication that these elicitations served a management function.<sup>7</sup>

While more elicitations were addressed verbally to listeners than to readers, most elicitations during reading turns did not include a verbal orientation. However, a substantial percentage of those elicitations which did not have a verbal orientation were addressed to listeners as well as the reader (26.4 percent). In other words, the teacher often looked toward listeners as well as the reader when making an unspecified elicitation as when asking "What's the t-word?" in the following example:

Example Three  
Medium Low Group  
Reader: Peter  
Listeners: Jeff, Dale, Darlene, Sara

Peter: "takes her . . ."  
Teacher: "What's she taking?  
Shes's taking  
her what?  
What's the t-word?"

Jeff talks to Dale  
who looks up and  
starts to play with his  
marker. Darlene looks up.  
The teacher points to Dale's book.

Dale, are you watching?  
Come on, Jeff.  
"Takes her . . ."

The teacher points to  
Jeff's book, then to Sara's.

Sara: "Time"  
Teacher: "Takes her . . ."  
Group: "Time . . ."  
Teacher: "Time." Alright.

In this example, the teacher is oriented toward the reader during her first elicitation, but later turns toward several other group members who have become inattentive. Though she doesn't address them with a verbal nomination, she remains oriented toward them while giving later elicitations and appears to be encouraging their response. Furthermore, the fact that these elicitation are again accompanied by several acts of verbal and non-verbal management indicate that the floor is being opened to general participation for management purposes and not because Peter was unable to figure out the word on his own. Since only the first two elicitations were addressed to him it remains unclear whether or not he could have gotten the word himself with more time and assistance.

While, in this case the teacher appeared to be opening the floor to others intentionally; in other cases, such as the following example, it is less clear whether or not she meant for other students to participate.

Example Four  
Low Group  
Reader: Tammy  
Listeners: Cynthia, Jennifer

Teacher: "Come here and . . ."  
Come here and do  
what?  
Tammy: "look"  
Teacher: What do you do with  
your eyes? What's another  
word?  
Jennifer: "see"  
Teacher: "see."

Cynthia looks up. The teacher points to her book, then back to Tammy's book.

In this interaction, the teacher points at Cynthia's book to get her attention while giving the first elicitation. Although it is not clear that she meant for others to participate, her non-verbal management also involves a non-verbal orientation away from the reader. Since students rely

on non-verbal orientation as an indicator of turn allocation, they may have interpreted this as an open invitation to respond regardless of the teacher's intention.

This is also illustrated in the next example from the medium low group:

Example Five  
Medium Low Group  
Reader: Jeff  
Listeners: Gary, Sara, Dale,  
Peter, Ted

Gary and Ted are  
playing with their  
bookmarkers. Sara  
is looking around.

Teacher: Here we go. (To Gary)  
"Ll . . ." (To Jeff)  
"What kind of dogs?"  
Jeff: "Little"  
Teacher: "little . . ."  
Jeff: "dogs"  
Teacher: (To Jeff) What are they  
doing? Now let's look at  
the s-word. (To Gary)  
"Little dogs s-s-s . . ."  
Group: "sit"  
Teacher: "sit." All right.

Teacher points to  
Gary's book, then to  
Jeff's book.  
Gary and Ted continue  
to play with markers.

Teacher points to  
Jeff's book, then to  
Gary's.

Throughout this reading turn the teacher attempts to regain Gary's attention by pointing to his book, at the same time providing the reader with clues. Consequently she is sometimes oriented toward the reader while giving a clue, and sometimes oriented toward Gary. Since it is not clear who is meant to respond the final word, "sit," is read by several members.

These examples illustrate a second way in which the simultaneous performance of management, turn-allocation, and academic activities can result in the disruption of students' reading turns. In both cases the teacher was engaged in non-verbal management while providing verbal elicitations. Since non-verbal management usually requires the teacher to be oriented away from the reader, students may interpret this non-verbal orientation away from the reader as an invitation for open participation. Consequently, other students may provide the correct answer before the reader has sufficient time to figure out the word alone.

Although these examples indicate that the teacher's non-verbal orientation toward listeners is often due to the simultaneous performance of management and academic activities, the precise extent to which this occurred is difficult

to determine. This is due in part to the use of more subtle forms of management such as the use of eye gaze to monitor students' behavior as in the following example:

Example Six  
Medium Low Group  
Reader: Peter  
Listeners: Dale, Gary, Jeff

Teacher: Peter.	Dale is looking at
Peter: "The dogs . . ."	Gary, who is looking
Teacher: (Looking toward Peter)	away. Dale looks
"The dogs l-l-like . . ."	down. Gary makes
-----	noises and looks
Teacher: (Looking around the group)	at Dale. Jeff
"to run." What kind of	looks away.
dogs are these?	
Group: "little"	

In this interaction, the teacher is oriented toward the reader during the first elicitation. However, several group members have become inattentive and the teacher begins to monitor their behavior by looking around the group as she provides the next elicitation. While no explicit management takes place, it appears that the teacher is oriented away from the reader for management purposes and not because she feels the reader is unable to read on his own since the second elicitation was addressed to the entire group before Peter had a chance to read it alone.

In addition to the use of more subtle forms of management, elicitations might be used for management purposes independent of other management acts. Thus while explicit management acts were found to occur in 65.5 percent of the cases when the teacher was oriented toward listeners during reading turn elicitations, the actual extent to which elicitations were used either to perform a management function or simultaneously with some form of management is likely to be considerably higher.

While this practice of simultaneously performing management, turn-allocation, and academic activities was expected to occur in lessons with students of all levels of ability it was expected to occur more often in lessons with low ability students. There were four reading groups in this class representing four levels of reading ability. Table 2 shows the number of elicitations which were oriented toward listeners in each of the four groups, indicating that this occurred far less often in the high reading group than in any of the other three groups. When the amount of material covered by the groups is controlled for (see Column Two), it is clear that this practice was

more common in the lower groups than in the higher groups as well as being more common in the medium high group than in the high group.

As illustrated in all of the examples, one common effect of performing management, turn-allocation, and academic activities simultaneously was the disruption of students' reading turns with other members providing words that the reader may have been able to read alone with more time or assistance. While other members are particularly expected to participate when addressed verbally, non-verbal orientation away from the reader is also expected to result in listeners providing the correct word regardless of whether or not the teacher intended to open the floor to general participation.

Table 3 shows that when an elicitation was addressed verbally to the reader, the reader was much more likely to respond than were the listeners. Likewise, when an elicitation was addressed verbally to the listeners, they were more likely than the reader to respond. However, since a verbal orientation was generally absent, it appears that students also relied considerably on the teacher's non-verbal orientation. Consequently, when the teacher was oriented solely toward the reader, listeners responded in 31.9 percent of the cases as compared to responding in 76.6 percent of the cases when they were included in her non-verbal orientation. Thus, when the teacher was oriented away from the reader, the reader provided the correct word in only 23.4 percent of the cases while having his or her turn disrupted 76.6 percent of the time. As shown previously, this non-verbal orientation may result from the teacher's intentional use of elicitation to regain the attention of listeners as well as from the practice of performing non-verbal management acts while giving verbal elicitation. Although, in the latter case, the teacher may not intend to open the floor, it appears that the teacher's non-verbal orientation is relied on by students as an important indicator of turn-allocation regardless of its actual intention.

### Discussion

The results of this study indicate that management and academic activities are often performed simultaneously during students' reading turns particularly in low reading groups. While this practice may offset the distracting impact of management, it was found to frequently result in the disruption of students' reading turns. Because the teacher was oriented away from the reader while managing, other students often provided the correct word. As a result,

readers often did not have sufficient time to figure out more difficult words on their own, thus hindering their learning of new material.

It could be argued that students appreciated having words provided by others and that reading turn disruptions promoted rather than hindered student learning. However, comments made by students both during actual reading lessons and during interviews indicate that most students did not like to have other students read during their reading turn. For example, after being helped by another student, a member of the low group turned to the student and said angrily, "You don't have to tell me!"

When students were asked if they liked having other students help them read, less than a third of the students reported that they liked having others help them. One medium-low group member said he did not like to be helped because "they read the whole page and I want to learn to read." Other students said they did not like to be helped because they wanted to read by themselves.

Turn disruption occurred in some cases as a result of the teacher's use of elicitation to perform management as well as academic functions. Up until now, most sociolinguistic studies of classroom interaction have attempted to classify the speech acts of teachers and students according to either academic or management functions (Sinclair and Coulthard, 1975; Mehan, 1979.) This analysis indicates that teachers may use a single speech act such as an elicitation to perform both of these functions and furthermore that by doing so, may have a negative impact on student learning. Future studies of classroom interaction should be alert to the fact that a single act may have more than one function and that this could have important consequences for students.

Turn disruption also occurred when the teacher's non-verbal orientation away from the reader during management acts was interpreted by students as an invitation to respond. This phenomenon is due to the fact that, since the entire lesson is one long conversation between the teacher and students, turn allocation is the teacher's continuous responsibility. Thus even when she is not consciously allocating the floor, students are likely to look to her behavior for turn allocation cues, relying on non-verbal orientation when verbal cues are absent. The situation is further compounded by the ambiguous nature of many non-verbal behaviors. Because the same behavior is often used to convey a variety of meanings, it is easy for students to misinterpret the meaning of a teacher's non-verbal act; or, in this case, to interpret pointing or eye gaze in their direction as an invitation to respond. Further



in-depth studies of classroom interaction using video-taped data are needed to examine other cases where the teacher's non-verbal behaviors may be misinterpreted by students.

More generally, the results of this study indicate the importance of including non-verbal behavior in future research on turn taking. Much of the previous work in this area has relied mainly on audio data and thus has not systematically examined the role of non-verbal orientation in turn-allocation (Sacks, Schegloff, and Jefferson, 1974; Sinclair and Coulthard, 1975; McHoul, 1979). The research on turn taking which has included non-verbal behaviors has been restricted for the most part to two-party conversations<sup>8</sup> (Duncan and Fiske, 1977; Kendon, 1967). Consequently, little is known regarding the role of non-verbal orientation in groups of three or more, though the results of this study indicate that it may play a far more important role than verbal orientation. Furthermore, since non-verbal orientation is likely to be used for multiple purposes in other interactions as well (e.g., to monitor the reactions of listeners,) a phenomenon similar to the one which took place in this classroom may occur where the use of non-verbal orientation for one purpose inadvertently becomes a turn-allocation signal. One consequence of this might be the inadvertent allocation of turns to higher status people because of greater concern about their reactions and thus more eye gaze in their direction.

The results of this study further suggest that it is difficult for teachers to avoid the negative effects of management. To begin with, management, as a form of misinvolvement is likely to be distracting and produce further misinvolvement by students. However, attempts to minimize the distracting effect of management by combining it with academic activities were found to have other negative effects, specifically the disruption of students' reading turns.

Because of the negative effects of management, the teacher is often faced with a dilemma. Should she ignore the two girls who are comparing the different shapes they've made with their markers and devote her complete attention to the student who is having trouble with the word "climb"? Or should she try and regain the attention of the two girls and other students who may not be paying attention, perhaps by inviting anyone to read the problematic word? If she ignores the two girls they may continue to provide a distraction for others, and furthermore may not learn to read the word "climb" as quickly as they would

if they were paying attention to the lesson. However, if she attempts to get their attention during the reading turn, she is likely to either interrupt the flow of the lesson or, if she combines management with academic activities, encourage the participation of others when perhaps the reader could have gotten the word himself with one more clue.

Given the complex responsibilities facing the teacher, there is no simple solution to this dilemma. However, it appears crucial that management be minimized as much as possible. This can be done by limiting the size of instructional groups as the fewer students in a group, the less opportunity there is for inattention and thus the less need for management. Also, the common practice of grouping inattentive or immature students together, is questionable in light of these findings. By grouping such students together, the need for management is increased, and thus the negative effects of management are also more prevalent.

In summary, the simultaneous performance of management and academic activities during reading turns was found to often result in the disruption of those turns with other members providing the correct word. Most students did not appreciate the help of their fellow students, preferring instead to read by themselves. However, this means that the teacher is often faced with a dilemma as to whether to ignore disruptions by students or create further disruption through managing student inattention; a dilemma for which there appears to be no simple solution.

Non-verbal Code

Non-Verbal Transcript

Verbal Transcript

Verbal Code

- 1. Verbal
- 2. Nomination
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10. Elicitation
- 11. Unspecified
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.
- 21.
- 22.
- 23.
- 24.
- 25.
- 26. Elicitation
- 27. Specified to
- 28. Listeners
- 29. Turn Disruption
- 30.
- 31. Management
- 32.
- 33.

Teacher: Alright, now Cynthia, you can read up at the top of the page.

(To Paula) I'll show you about that game this afternoon. That's a new one. Right. Okay. Who is that? Y-o-u is . . .

Cynthia: "You" (Pause)  
Teacher: (To Cynthia) First, what does she say they can do? "You can r-r-r."  
Cynthia: "run"  
Teacher: "run" (Pause)  
That's right.  
"You can run" (Pause)

Who knows that little word, a-n-d?

Jennifer: "and"  
Teacher: "and." Robin, get your marker under the right row of words.

Oriented toward Reader

Oriented toward Reader

Management Oriented towards Listeners  
Management

Paula, a member of another group, comes over to the teacher, carrying a game.

The teacher points to Cynthia's book. Robin is folding her marker and looking away from her book.

Robin is still playing with her marker. Judy turns around to look at something in the classroom. The teacher points to Judy's book.

The teacher points to Robin's book, then to Cynthia's book

TABLE 1  
Verbal and Non-Verbal Orientation  
of Reading Turn Elicitations

	Verbal Orientation		Non-Verbal Orientation		Total
To Reader	11	(44%)	134	(73.6%)	145 (70%)
To Listener	14	(56%)	48	(26.4%)	62 (30%)
Total	25	(100%)	182	(100%)	207 (100%)

TABLE 2  
Elicitations\* Addressed to Listeners  
by Ability Level of Reading Groups

Group Level	Number of Elicitations Addressed to Listeners	Number of Elicitations Addressed to Listeners per Amount of Material Read**
High	5	.030
Medium High	16	.084
Medium Low	24	.130
Low	17	.115

\*Refers only to reading turn elicitations.

\*\*Computed by dividing the number of elicitations by the number of lines read aloud.

TABLE 3  
Verbal and Non-verbal Orientation of Elicitation\*  
and Response by Reader or Listener\*\*

	Verbal Orientation:		Non-verbal Orientation:	
	To Reader	To Listener	To Reader	To Listener
Correct Response:				
by Reader	6 (85.7%)	1 (7.7%)	82 (68.1%)	9 (23.4%)
by Listener	1 (14.3%)	12 (92.3%)	39 (31.9%)	34 (76.6%)
Total	7 (100%)	13 (100%)	121 (100%)	43 (100%)

\*Refers only to reading turn elicitations.

\*\*Cases where the teacher provided the correct response were not included.

## NOTES

1. Although turn allocation could also be considered to be a form of management, the term management will be used throughout this paper to refer to controlling students social behavior and, in particular, their inattentive behavior.
2. See Brophy and Good (1974) for a review of this literature.
3. See Streeck (1978) for another discussion of acts performing multiple functions.
4. See Eder (1979) for a more detailed discussion on selection of classroom and classroom characteristics.
5. This was also found to be the primary activity in most ability-based reading groups (Austin and Morrison, 1963.)
6. All reliability coding was based on agreement for specific acts, rather than agreement for number of acts, which is a more stringent measure of reliability.
7. This does not mean that the other two elicitations did not serve a management function since they may have been combined with more subtle types of management such as eye gaze or have performed a management function independent of other acts.
8. One of the few studies to examine the role of non-verbal orientation in turn allocation in larger groups focused mainly on the teacher's use of non-verbal orientation to maintain the floor for students after allocating it to them, (Mehan, 1979).

## REFERENCES

- Austin, Mary and Coleman Morrison. *The First R: The Harvard Report on Reading in Elementary School*. New York: The MacMillan Company. 1963.
- Brophy, J.E. and T.L. Good. *Teacher Student Relationships: Causes and Consequences*. New York: Holt. 1974.
- Cherry, Louise. "A Sociolinguistic Approach to the Study of Teacher Expectations." *Discourse Processes* 1:373-393. 1978.
- Cicourel, A., K. Jennings, S. Jennings, K. Leiter, R. MacKay, H. Mehan, and D. Roth. *Language Use and School Performance*. New York: Academic Press, Inc. 1974.
- Duncan, Starkey and Donald Fiske. *Face-to-Face Interaction: Research, Methods, and Theory*. New York: Wiley. 1977.
- Eder, Donna. *Stratification Within the Classroom: The Formation and Maintenance of Ability Groups*. Unpublished dissertation. University of Wisconsin, Madison Wisconsin. 1979.
- Goffman, Erving. *Interaction Ritual*. New York: Doubleday and Company. 1967.
- Kendon, A. "Some Functions of Gaze-Direction in Social Relationships." *Acta Psychologica*, 26:22-63. 1967.
- Kounin, J.S. *Discipline and Group Management in Classrooms*. New York: Holt, Rinehart, and Winston, Inc. 1970.
- Leiter, Kenneth. "Ad Hocing in the Schools: A Study of Placement Practices in the Kinuergartens of Two Schools." In *Language Use and School Performance*. New York: Academic Press, Inc., pp.17-75. 1974.
- McHoul, Alexander. "The Organization of Turns at Formal Talk in the Classroom." *Language in Society* 7:183-213. 1979.
- Mehan, Hugh. "Accomplishing Classroom Lessons." In *Language Use and School Performance*. New York: Academic Press, Inc., pp. 76-142. 1974.
- \_\_\_\_\_. *Learning Lessons*. Boston: Harvard University Press. 1979.
- Sacks, Harvey, E. Schegloff, and G. Jefferson. "A Simplest Systematics for the Analysis of Turn Taking in Conversation." *Language* 50:696-735. 1974.
- Sinclair, J.M., and R.M. Coulthard. *Toward an Analysis of Discourse*. New York: Oxford University Press. 1975.
- Streeck, Jurgen. *Toward a Speech Act Analysis of Power in Interaction*. Unpublished Paper, Department of Sociology, University of California, San Diego, California. 1978.